Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	
Federal-State Joint Board on Universal Service	CC Docket No. 96-45
High-Cost Universal Service Support	WC Docket No. 05-337

COMMENTS OF VERMONT PUBLIC SERVICE BOARD, VERMONT DEPARTMENT OF PUBLIC SERVICE, AND MAINE PUBLIC UTILITIES COMMISSION

To: The Commission

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SUMMARY

The FCC must ensure that its Universal Service Fund ("USF" or "Fund") rules advance, as well as preserve, universal service when it modifies its USF mechanism and its sufficiency/reasonable comparability standards to follow the Tenth Circuit Court of Appeals' instructions. It must adopt lower benchmarks both for reasonable comparability and cost support purposes to ensure that its Fund more aggressively abates too wide rate differences in rural and urban areas. It must also link its support mechanism to its sufficiency/reasonable comparability standards so that it may find empirically that its rules achieve Congress's goals.

1. Sufficiency. The FCC must provide sufficient support to carry out all the Section 254(b) principles. In meeting those principles, it may consider all its universal service programs. The FCC must not lose sight that the Tenth Circuit appeal focused on the reasonable comparability principle, and thus the FCC's primary goal on remand should be to ensure reasonably comparable services and rates in rural and urban areas. The FCC should also ensure that support is sufficient for carriers to build-out networks in rural areas to provide access to advanced services and information services under Section 254(b)(2), and ensure that telecommunications services are reasonably comparable in rural and urban areas under Section 254(b)(3). The FCC has provided incentives for rural carriers to achieve these goals, but has not adopted the same formulas in the non-rural program.

The FCC must use the non-rural high-cost mechanism to address those principles that are not already covered through separate universal service programs. It has already established its Lifeline and Link-Up programs to ensure rates are affordable for consumers under Section 254(b)(1), and these programs, not high-cost support mechanisms, are the most effective means to meet the affordability goal.

The FCC cannot provide less than sufficient support to meet the reasonable comparability goals. Congress required that support be "sufficient" under Section 254(e), separate and independent of any Section 254(b) affordability principle. The FCC may guard against an *excessive* fund, but must ensure that the fund is *sufficient*.

2. Comparability. To measure comparability, the FCC should not use local rate data because rates are based on too many differing factors, making comparisons arbitrary. Instead, the FCC should compare net subscriber cost in rural and urban areas as a proxy for rates, a cost that reflects what subscribers pay for local service. Net subscriber cost equates to carriers' cost of service per access line, removing revenues carriers receive from other sources.

To advance, as well as preserve, universal service, the Court directed the FCC to provide sufficient support to "narrow the existing gap" and "abate" the "significant variance" between rural and urban rates. These mandates demand a more aggressive comparability standard. Consequently, the FCC should adopt a comparability standard of not more than 125% of nationwide urban average net subscriber cost.

3. Funding Mechanisms. The FCC should not abandon its existing reliance on cost-based mechanisms for support, but it should make certain modifications to the existing non-rural mechanism. Costs are the most reliable means to determine support, particularly because using rates to calculate support levels can create perverse incentives to game the system. The FCC should use net subscriber cost to determine a carrier's need for support and, consistent with its rates standard, it should provide support if a carrier's net subscriber cost exceeds 125% of the nationwide urban average net subscriber cost. This system will provide sufficient support, but will not lead to an "excessive" fund. Through the "net subscriber cost" formula, the USF mechanism will, for the first time, recognize that a significant portion of local company costs is

recovered through intercarrier payments, special access charges, and sale of regulated non-basic services. Using this formula can significantly reduce the size of the Fund and make a lower benchmark financially achievable.

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The Vermont Public Service Board ("VtPSB"), the Vermont Department of Public Service ("VtDPS"), and the Maine Public Utilities Commission ("MPUC"), hereby submit comments in response to the Federal Communications Commission's ("FCC" or "Commission") *Notice of Proposed Rulemaking* ("*NPRM*"),[1] released December 9, 2005, regarding issues raised by Section 254(b) of the Communications Act of 1934, as amended ("the Act"),[2] and the United States Court of Appeals for the Tenth Circuit's ("Tenth Circuit" or "Court") decision in *Qwest Corporation v. Federal Communications Commission*.[3] VtPSB and MPUC were both parties to *Qwest II*. VtDPS was also a party to the prior case, *Qwest Corporation v. Federal Communications Commission.*[4]

[1] *See Notice of Proposed Rulemaking, In the Matter of Federal-State Joint Board on Universal Service; High-Cost Universal Service Support*, 21 FCC Rcd. 587 (2005)("*NPRM*").

[2] *See* Communications Act of 1934, as amended by the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996), codified at 47 U.S.C. § 151, *et seq*.

[3] *See Qwest Corp. v. Fed. Communications Comm'n*, 398 F.3d 1222 (10th Cir. 2005)("*Qwest II*").

[4] *See Qwest Corp. v. Fed. Communications Comm'n*, 258 F.3d. 1191 (10th Cir. 2003)("*Qwest I*").

I. INTRODUCTION

In October 2003, the FCC issued an Order ("*First Remand Order*")[5] that ultimately was remanded by the Tenth Circuit Court of Appeals in *Qwest II*. In its *NPRM*, the FCC now seeks comment on three major issues in response to that remand: (1) the definition of "sufficiency" in Section 254 and the meanings of the various principles set forth in Section 254(b); (2) a standard for reasonable comparability pursuant to Section 254(b)(3); and (3) a cost mechanism that will provide sufficient support to achieve Congress's principles in Section 254(b).[6]

II. THE FCC SHOULD ADDRESS ALL SECTION 254(b) PRINCIPLES IN ITS SUFFICIENCY DEFINITION, AND SHOULD DETERMINE SUFFICIENCY BY THE COMBINED EFFECT OF ALL SECTION 254 PROGRAMS

A. SUFFICIENCY

The *Qwest II* Court criticized the FCC's definition of "sufficient" because, even though it recognized the importance of reasonable comparability, it "ignored" all other principles enumerated in Section 254(b) and "failed to demonstrate why reasonable comparability conflicts with or outweighs the principle of affordability, or any other principle."[7]

In response, the FCC seeks comment on how it should balance the seven Section 254(b) principles in defining "sufficient."[8] The FCC states that the Court instructed it to "consider" all seven principles, but permitted it to give greater weight to some principles.[9] The FCC seeks comment on whether any principles conflict and, if so, how it should balance those principles to

[5] *Order on Remand, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, In the Matter of Federal-State Joint Board on Universal Service*, 18 FCC Rcd. 22,559 (2003) ("*First Remand Order*").

[6] *See NPRM* ¶ 7.

[7] *Qwest II* at 1234.

[8] *See NPRM* ¶ 8.

[9] *See id.*

resolve the conflict.[10] In this process, the FCC asks a number of questions about how the non-rural mechanism can achieve affordability and whether it should consider the burden of universal service contributions when determining whether rates are affordable.[11]

1. Definition

The FCC should define "sufficient" support, for purposes of Section 254(e), as "enough support, through all the universal service programs funded under Section 254 mechanisms, to ensure that the support-related principles set forth in Section 254(b) are preserved and advanced." This definition will explicitly ensure that the FCC addresses all of the statutory principles, not just reasonable comparability. It also recognizes that some programs advance several principles, even if one is primary.

2. Conflicting Principles

While the Court's decision did mention the possibility of conflicts among the statute's principles, it also complained in the same paragraph about the "limited record" before it.[12] This complaint was justified. The Court had before it little or no information about other major Federal high-cost support programs or the Lifeline and Link-Up programs.[13] The FCC's first priority in addressing this problem should be to provide more complete information. The FCC should seek to reconcile the various statutory principles in Section 254(b) only where an actual conflict exists.

The Commission's next Order in this proceeding ("*Second Remand Order*") should thoroughly explain the full context of all its universal service programs, including their purposes,

[10] *See id.*

[11] *See id.*

[12] *Qwest II* at 1234.

[13] Moreover, there is no reason to believe that the Court was aware of state policies that advance Section 254 principles, such as rules that limit disconnections for nonpayment.

sizes, effects, and relationships to the statutory principles. Specifically, the FCC should make comprehensive findings that describe how it addresses each Section 254(b) principle through one or more of its support programs or fund collection mechanisms. It should also show how those support programs, taken together, provide sufficient support.

If any court is asked to review the *Second Remand Order*, a more complete record will support a conclusion that the FCC has addressed each of the statutory principles through one or more programs and that the overall pattern of programs, although complex, fully covers the range of statutory principles. Providing this additional explanation will also allow a reviewing Court to "properly assess the total level of federal support for universal service to ensure 'sufficiency.'"[14]

If the FCC cannot satisfy one principle without causing conflict with another, *only then* should it balance the principles. The FCC must make specific, express findings if it determines a principle conflicts with or outweighs another.[15] If the universal service principles in the statute conflict at all, that conflict is certainly narrower than that suggested in the *NPRM*.[16] The FCC cannot make an assumption that one principle conflicts with another. For example, it cannot simply assume that too large a fund will conflict with the affordability principle.[17] Nor can it depart from the listed policies to achieve some other goal. Rather, it must follow the statutory principles and cannot balance them with others, such as keeping the fund smaller. For example,

[14] *Qwest I* at 1204. The Court directed the FCC on remand "to explain further its *complete* plan for supporting universal service." *Id.* at 1205 (emphasis added).

[15] *See Qwest II* at 1234.

[16] *See NPRM* ¶ 10.

[17] *See id*.

the FCC cannot determine that it wants to keep the Fund at a particular size and work backward to develop a mechanism that produces that level of support from contributions.[18]

In the end, even if the FCC finds that it must balance competing Section 254(b) principles, it still cannot provide less than sufficient support. Once "sufficient" has been defined, other subsections require that the FCC provide enough support to meet that standard.[19]

B. SECTION 254(B) PRINCIPLES

The FCC should separately address each Section 254(b) principle as part of its definition of sufficiency. Support is sufficient only if it achieves the objectives set forth in the statute.

1. Section 254(b)(1): Quality Services Should be Available at Just, Reasonable, and Affordable Rates

In the *NPRM*, the Commission asks whether ensuring that rates in rural areas are reasonably comparable to rates in urban areas also ensures that those rates are affordable.[20] In addition, the Commission seeks comment on whether it should define "affordable rates,"[21] and how affordability affects universal service contributions.[22]

The FCC should define affordability, but it should find that high-cost support indirectly advances affordability and does not conflict with it. The FCC should also find that high-cost support programs cannot directly address affordability principles and are not the best or most efficient mechanisms to do so.

[18] *See Qwest I* at 1200.

[19] *See* 47 U.S.C. § 254(d)-(e).

[20] *See NPRM* ¶ 9.

[21] *See id.* ¶ 10.

[22] *See id.* ¶ 11.

a) Differences Between "Affordable" Rates and "Reasonably Comparable" Rates

The principle of "affordable rates" is different from "reasonably comparable rates." The reasonably comparability principle restricts the allowable range of rates throughout urban and rural parts of the country without regard to income levels of individuals or groups of individuals. Although a program aimed at making rates reasonably comparable will also help make rates affordable, the two principles are largely independent.

b) Affordability

In general, increasing high-cost universal service funding reduces rates in high-cost areas, thereby indirectly supporting affordability in those areas. However, for several reasons, high-cost programs are not the most effective tools to address affordability.

First, high-cost programs do not always produce rate decreases. The statute requires carriers to "use [high-cost] support for the provision, maintenance, and upgrading of facilities and services for which support is intended."[23] Because high-cost fund monies can be used to upgrade, construct, or maintain facilities, Federal support does not necessarily reduce end-user rates. Further complicating the issue, many states have eliminated or greatly modified traditional "rate of return" regulation of local companies. In these states, an increase in high-cost support may not affect consumer rates at all.

Second, even in areas where increased support actually does lower rates, the benefits of that support flow equally to rich and poor customers. Therefore, high-cost support is an efficient means of addressing affordability problems only in communities with homogeneous incomes, a condition that is seldom satisfied. In contrast, the Lifeline and Link-Up programs have

[23] 47 U.S.C. § 254.

individual eligibility criteria and are therefore efficient methods to address individual affordability problems.[24]

c) SBC's Proposal

For these same reasons, the FCC should reject SBC's proposal to base high-cost support on the median household income in each community.[25] While well-intentioned, this proposal has two fundamental problems.

First, it is inefficient. High-cost support programs, for the reasons explained above, are inherently inefficient and uncertain mechanisms to address telephone service affordability for low-income households.

Second, the SBC proposal is unfair to individual customers. It inaccurately assumes that income in a community is homogeneous and equally available to all. In truth, all communities have a range of incomes, some wider than others. In extreme cases, communities even have "bi-modal" income distributions with a high median income and a significant minority of households with low or moderate incomes.[26] By reducing support to wealthy communities, the SBC proposal thereby discriminates against poor people living in wealthy communities. A

[24] *See Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Lifeline and Link-Up*, 19 FCC Rcd. 8302, 8305, 8312 (2004) (citing the statutory goals of the Lifeline/Link-Up program as "maintaining affordability and access of low-income consumers to supported services, while ensuring that support is used for its intended purpose"); *see also Order on Remand, In the Matter of Access Charge Reform; Price Cap Performance Review for LECs; Low-Volume Long Distance Users; Federal-State Board on Universal Service,* 18 FCC Rcd. 14,976, 14,982 (2003) ("In order to preserve affordability for low-income consumers, the Commission [ ] increased universal service support under the Lifeline mechanism").

[25] *See NPRM* ¶ 10.

[26] For example, Manchester, Vermont is a town with an active tourism industry. According to the 2000 U.S. Census, the median income in Manchester is $57,000, a figure that is substantially higher than the national average. This is a reflection of the substantial portion of wealthy households in that town. 32% of Manchester households have incomes of $100,000 or more. However, 21% of the households in Manchester have incomes of less than $20,000.

low-wage worker who lives in a wealthy community would pay more for telephone service under this proposal than a low-wage worker in a poor community.

A plan that condemns some low-income customers to higher telephone rates merely because they have wealthy neighbors cannot meet the test of being "just and reasonable," as required by Section 254(b)(1). Nor would it satisfy the reasonable comparability test in Section 254(b)(3). Third, such a plan would likely exacerbate any existing affordability problems, making service less affordable for some and more affordable for others, depending on the income of their neighbors.

d) Size of the Fund

The *NPRM* asks whether the FCC should consider the burden of universal service contributions in determining whether rates are affordable.[27] The size of the Fund has been an issue in this proceeding for some time now. In its *First Remand Order*, the FCC determined that the non-rural high-cost fund must be "only as large as necessary."[28] The Tenth Circuit, however, held that the FCC had failed to appropriately consider the range of principles in Section 254(b).[29] The FCC now seeks comment on whether it should use the affordability principle as a new basis for avoiding too large a fund.[30]

First, even though the Tenth Circuit expressed concern about gratuitous subsidies, its observation is a criticism of *excessive* support, not an argument against *sufficient* support.[31]

[27] *See NPRM* ¶¶ 9-11.

[28] *See First Remand Order* ¶ 30.

[29] *See Qwest II* at 1234.

[30] *See NPRM* ¶ 11.

[31] *See Qwest II* at 1234 citing *Qwest I* at 1200 ("as we explained in our previous decision, excessive subsidization arguably may affect the affordability of telecommunications services, thus violating the principle in § 254(b)(1). The FCC is compelled to balance the § 254(b) principles to the extent they conflict").

Second, the Tenth Circuit stopped far short of encouraging the FCC to find that the sufficiency requirement conflicted with the affordability principle. In no way did it suggest that the requirement to provide sufficient support is trumped by notions of affordability. The *Second Remand Order* should clearly state that Section 254(d)-(e) obligates the FCC to provide sufficient support, and no concept of "excessive subsidization" can undermine that duty. Now that the Tenth Circuit has expressed concerns about the FCC's failure to look at all of the principles, it would be unfortunate indeed if the agency responds by finding in the *Second Remand Order* that high-cost support should be determined only by the single principle of affordability.

Third, as discussed above, the FCC currently addresses affordability concerns through its Lifeline and Link-Up programs, and the Tenth Circuit did not find, or even suggest, that these programs were inadequate. There is no basis in Section 254 for the proposition that customers in low-cost areas should be free from contributing to areas with high-cost programs; to assert otherwise would be fundamentally contrary to the goal of preserving and advancing universal service.[32]

Fourth, the Court had a very "limited record" before it.[33] As a result, it failed to consider the *benefits* of universal service funding. Assuming even minimal rationality to the FCC's support mechanisms, support to high-rate (or high-cost) areas improves both comparability and affordability. To improve the record in any subsequent review, the Commission's *Second*

[32] *See, e.g., Pub. Serv. Comm'n of D.C. v. Fed. Communications Comm'n*, 906 F.2d 713, 718 (D.C. Cir. 1990)(cost shift affecting the District of Columbia justified by avoidance of burdensome and unnecessarily complex separations manual for all large carriers in the rest of the country).

[33] *Qwest II* at 1234. The FCC's *First Remand Order* failed to mention, much less explain, the relationship between affordability and high-cost support. *See id.*

Remand Order should explain in detail how the benefits of any support increase will outweigh the additional burdens on contributors.

e) Existing Affordability Programs and Affordability Options

The FCC has chosen to address affordability primarily through its Lifeline and Link-Up programs. Lifeline, at least, is demonstrably improving affordability. For example, states that adopted Lifeline programs before 1998 generally had lower penetration rates in 1984 than other states,[34] but, by 1997, that difference had been largely erased.[35] Further, between 1984 and 1998, states that adopted Lifeline programs had a subscribership increase among low-income households twice as large as other states, although other factors may have contributed to this result.[36]

The Lifeline program became even more successful after it was expanded in 1998. Since then, penetration rate increases have been greater, on average, in states with Lifeline programs than in states without Lifeline programs, particularly for low-income households.[37] In states that provide the maximum or near-maximum amount of support that can be matched by Federal support, telephone penetration for low-income households increased by 3.0% or more between 1997 and 2004.[38]

If the FCC concludes that it has made insufficient progress on affordability, it should consider several options. Each of the following options would probably improve penetration and advance the affordability goal:

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[34] *See* Universal Service Monitoring Report, CC Docket Nos. 96-45, 98-202 (2005)("Monitoring Report") at 6-20, 6-21.

[35] *See id.*

[36] *See id.* at 6-7.

[37] *See id.* at 6-6.

[38] *See id.* at 6-7.

- Increase Lifeline discounts.
- Exempt Lifeline customers from universal service contributions. These customers are already entitled to Subscriber Line Charge ("SLC") waivers and reduced rates. Waiving Lifeline customers' USF contribution requirements, whether partially or entirely, would be a targeted and efficient mechanism to resolve any perceived conflict between affordability and sufficient high-cost support.[39]
- Encourage more states to match Federal contributions to Lifeline.
- Reduce SLC charges. These charges, set solely by the FCC, are imposed on all local exchange customers (except Lifeline customers), whether they use their telephones frequently, infrequently, or not at all.
- Study the effect of state policies that improve penetration. For example, Vermont and Maine have rules requiring significant advance notice of disconnection, preventing disconnection of customers with medical conditions and allowing customers to retain local service despite nonpayment of toll bills. Vermont also has policies requiring carriers to provide service discounts to hearing-impaired customers who often have high

[39] This option would be particularly attractive if the FCC adopts a per-line or per-number contribution mechanism, because such a mechanism may operate like a head tax and increase the burden on at-risk customers.

usage charges. The FCC should encourage whatever it finds to be the best practices among the states that have jurisdiction over local exchange services.[40]

- Provide a more direct mechanism for Federal support to reduce local rates. In many cases, Federal support is deposited into a carrier's general fund, and the effect on local rates is not demonstrable, particularly where traditional rate regulation has been relaxed or abandoned by the state legislature or the state commission.

2. Section 254(b)(2): Access to Advanced Telecommunications and Information Services Should be Available in All Regions of the Nation

In determining the sufficiency of non-rural cost support, the *NPRM* asks whether the Commission should consider to what extent such support enables carriers in high-cost areas to upgrade their networks so that networks are capable of providing access to advanced services.[41] The Commission has found that using high-cost support to invest in infrastructure capable of providing access to advanced services is not inconsistent with the requirement in Section 254(e) that support be used only for the basic voice network.[42] The FCC should extend that finding here. At a minimum, the Commission should broaden the "no barriers" approach beyond rural carriers

[40] The FCC has now asserted jurisdiction over wireline broadband Internet service. *See Report and Order and Notice of Proposed Rulemaking, In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers, Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements, Conditional Petition o f the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises: Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises, Consumer Protection in the Broadband Era,* 20 FCC Rcd. 14,853 (2005). Because that service, when joined with Voice over Internet Protocol ("VoIP") service, effectively substitutes for local exchange service, the FCC could also consider adopting best disconnection state policies for that service.

[41] *See NPRM* ¶ 12.

[42] *See id*.

to also include non-rural carriers.[43] This would eliminate, in large part, existing discrimination against customers of non-rural carriers serving high-cost areas. The FCC should also consider explicitly allowing the use of USF funds for advanced services.

Rural carriers receive additional incremental support when they upgrade their loop plant to provide advanced services. The National Exchange Carrier Association ("NECA") reporting system annually collects current investment data from rural companies, and routinely uses that data to calculate high-cost loop support. Using this support, high-cost rural companies may upgrade their loop and feeder plant at a net carrying cost to subscribers of only 10%.[44] This specific and predictable support mechanism has many benefits, including the creation of a substantial incentive to upgrade plant and provide DSL service to customers.

In contrast, the FCC bases support for non-rural carriers on the "forward-looking" cost produced by its cost model. The FCC does not measure actual carrier investment because the model relies on a hypothetical "efficient" network. When a non-rural carrier upgrades loop or feeder plant to provide DSL, none of the model inputs is affected and the company must recover all incremental costs from consumers. Consequently, non-rural carriers have an incentive to derive as much revenue as possible from existing plant, rather than to upgrade to provide access to advanced services.

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[43] *See Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking, In the Matter of Federal-State Joint Board on Universal Service, Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers,* 16 FCC Rcd. 11,244 (2001).

[44] 25% of loop plant is separated to the interstate jurisdiction and recovered in that jurisdiction. The high-cost loop program supports 65% of the unseparated carrying cost of incremental plant for most rural companies, and 75% for some. *See* 47 C.F.R. § 36.631(c)(1)-(2). Thus Federal sources provide either 90% or 100% of the carrying cost of incremental loop investment. The High Cost Loop Support program does have a two-year time lag between investment report and receipt of support.

Rural telephone companies in Vermont and Maine have amply demonstrated the effects of this difference. These rural companies have significantly more DSL deployment than Verizon, the two states' only non-rural carrier. Anecdotally, this pattern apparently also holds true in most other states. Differing universal service mechanisms are likely a major reason for the differing results. The FCC's commitment to "forward-looking" cost models for large carriers means that actual investment in broadband-capable feeder and distribution plan cannot produce incremental support. By "assuming" an advanced network already exists, the model has the paradoxical effect of discouraging deployment of modern technology.

The cost measurement principle in the Universal Service Endpoint Reform Plan ("USERP") plan,[45] recently considered by the Joint Board, balances these two principles: encouraging needed plant improvements and constraining excessive spending. The plan relies primarily on embedded costs in order to increase investment incentives. It also allows use of models to limit excessive spending in investment or expense categories where appropriate. By merging its rural and non-rural plans, the FCC could ensure that all companies serving rural customers have fair and non-discriminatory funding to provide advanced services.

3. Section 254(b)(3): Consumers in All Regions of the Nation Should Have Access to Telecommunications and Information Services that are Reasonably Comparable to Services in Urban Areas at Rates that are Reasonably Comparable to Urban Rates.

Apart from defining reasonably comparable rates, the *NPRM* asks if the Commission should consider whether the telecommunications and information *services* provided in rural areas are reasonably comparable to the services provided in urban areas.[46]

[45] *See Public Notice*, 20 FCC Rcd. 14,267 (2005).

[46] *See NPRM* ¶ 13.

The FCC should address the "services" part of Section 254(b)(3) because Congress required comparability both as to rates and service levels in the statute. The FCC can address this goal most effectively by adopting incentives for non-rural carriers to build-out networks, similar to incentives now provided to rural carriers.[47] The FCC should also acknowledge that many state commissions have taken steps to encourage broadband deployment within their states, steps encouraged under the 1996 Act.

To monitor its success in achieving this goal, the FCC should establish a mechanism that measures differences between rural and urban service levels. The mechanism should include, at a minimum, surveys of the deployment of DSL or other forms of broadband service as well as fiber-to-the-home or very high capacity service. Surveys should not be based upon the number of postal area codes served by high capacity service, a measurement that masks the unavailability of such services in more rural areas. Instead, carriers should report on the percentage of their customers who can, if they wish, successfully order broadband services.

The Court found that Section 254 requires a partnership between the FCC and states to preserve and advance universal service.[48] To strengthen this partnership, the FCC should publish a methodology for surveys of advanced service deployment in the states and should encourage state commissions to act as data collection agents. This will encourage states to become more active in evaluating the level of broadband deployment within their borders. It will also give the FCC enough information to track whether services are reasonably comparable.

[47] As noted in the preceding section concerning Section 254(b)(2), one problem with advanced services deployment is the use of a cost model that "assumes" an advanced network, yet it has the paradoxical effect of discouraging deployment of modern technology.

[48] *See Qwest II* at 1232; *see also Qwest I* at 1203.

4. Section 254(b)(4): Telecommunications Service Providers Should Make Equitable and Non-Discriminatory Contributions to the Preservation and Advancement of Universal Service

The Commission asks for comment on whether it must determine that all providers' contributions are equitable and non-discriminatory when it evaluates whether support is sufficient.[49] The Commission also asks whether it should apply a different interpretation to "equitable and non-discriminatory" in Section 254(b) than in Section 254(d).[50] As discussed in the *NPRM*, the Commission is currently examining its USF contribution methodology in a separate proceeding.[51] Nonetheless, any decision by the Commission in that proceeding must ensure that non-rural high-cost support is "sufficient"; the contribution methodology should have no influence on the level of sufficient support.

5. Section 254(b)(5): There Should Be Specific, Predictable, and Sufficient Federal and State Mechanisms to Preserve and Advance Universal Service

The Commission asks whether it should determine that support is specific and predictable as well as sufficient.[52] It also asks whether it should define or interpret these terms.[53]

In the *First Remand Order*, the Commission relied on a discretionary system for supplemental support. The Commission asserted broad discretionary authority to grant or withhold such support and equally broad authority to determine the amount of that support, should any be needed. Such an *ad hoc* system cannot meet the statutory test of predictability and specificity. The *First Remand Order* mechanism amounted to little more than a suggestion that

[49] *See NPRM* ¶ 14.

[50] *See id.*

[51] *See id.* ¶ 29.

[52] *See id.* ¶ 15.

[53] *See id.*

some unspecified amount of support might be available, at some time, after some unspecified showing. No such system can possibly be characterized as "predictable."

To achieve specificity and predictability, the *Second Remand Order* must establish a support system with several characteristics:

- The input data must be preannounced and verifiable;
- The input data should be taken from public domain sources or it should be submitted by carriers and actually verified by the Commission;
- The input data should be found to be valid and reliable. If something serves as a "proxy" for something else, or is a "true up" or an "estimate" of something else, the Commission should make findings that the assumed correlation reliably exists;
- The support calculation must be based upon a published formula or a mechanism that can be replicated outside the Commission; and
- The support calculation must be ministerial and should minimize dependency upon case-specific findings and discretionary judgments.

All of the FCC's other high-cost programs currently satisfy these standards, including the High Cost Loop, Local Switching Support, Model-Based Support, Interstate Access Support, and Interstate Common Line Support programs.

6. Section 254(b)(6): Schools, Health Care Providers, and Libraries Should Have Access To Advanced Services

The Commission asks, because it already has separate programs for this purpose, to what extent it should consider whether its high-cost fund should help schools, libraries, and health care providers access advanced services.[54]

[54] *See id.* ¶ 16.

The Commission has developed targeted programs to address this principle most effectively. It should discuss those programs in its *Second Remand Order*, and find that it need not make any adjustment to its high-cost fund support mechanisms to meet this goal. To the extent that advanced infrastructure helps all customers, a high-cost plan providing incentives to build advanced networks complements the separate schools and libraries program.

7. Section 254(b)(7): Added Principles

The Commission asks, in determining whether non-rural high cost support is sufficient, to what extent it should determine that such support is competitively neutral.[55] Because the FCC has added competitive neutrality as a principle, it should determine whether its mechanism preserves and advances this goal.

8. Advancing Universal Service

The Commission asks whether it should determine how each Section 254(b) principle advances universal service as part of its analysis.[56] The Court noted that the FCC has a duty to both preserve and advance universal service under Section 254.[57] The Court's determination went beyond the reasonable comparability principle. Therefore, the *Second Remand Order* must demonstrate that the FCC's mechanism for non-rural carrier support advances each principle or, at minimum, explain why advancing each principle is not possible.

III. IN MEASURING REASONABLE COMPARABILITY, THE FCC SHOULD USE NET SUBSCRIBER COST AS A PROXY FOR RATES, AND IT SHOULD SELECT A BENCHMARK OF NO MORE THAN 125% OF THE NATIONWIDE URBAN NET SUBSCRIBER COST AS A COMPARABILITY STANDARD

In the second part of its *NPRM*, the FCC seeks comment on how it can define and measure a range for reasonably comparable urban and rural rates in a manner that will *advance*

[55] *See id.* ¶ 17.

[56] *See id.* ¶ 15.

[57] *See Qwest II* at 1235-36.

as well as preserve universal service.[58] The Court struck down the FCC's prior definition because the FCC had "ensured that significant variance between rural and urban rates will continue unabated" by establishing a standard of "two standard deviations over the nationwide urban rate," which did not *narrow the existing gap* between urban and rural rates.[59] The Court was very troubled that the FCC claimed that urban and rural rates had been reasonably comparable since the Act passed, even though the FCC's rate data showed wide variations between rural and urban rates.[60] When it examined the data closely, the Court determined that rural rates could still exceed the lowest urban rates by 100%.[61] And, even when it compared rural rates against a nationwide urban average, the Court concluded that rates were still so disparate that they could not be deemed reasonably comparable.[62]

In its *NPRM*, the FCC searches for a proper comparison basis, asking a number of questions about the rate data it should gather to assess the existing variances between rates as well as the specific rates it should use to measure reasonable comparability.[63] The FCC should not use that local rate data to determine comparability or as its basis for calculating support. Instead, it should use "net subscriber cost" as a proxy for "rates" in its reasonable comparability standard (and its support calculation). Also, it should adopt a numerical standard that will allow clear decision on whether net subscriber cost will be "reasonably comparable" after high-cost areas receive support. Finally, it should select a comparability benchmark of no more than 125% of nationwide urban average net subscriber cost ("nationwide urban" net subscriber cost),

[58] *See NPRM* ¶ 18.

[59] *Qwest II* at 1236.

[60] *See id.* at 1236-1237.

[61] *See id.* at 1237.

[62] *See id.*

[63] *See NPRM* ¶¶ 19-22.

thereby narrowing the existing gap between high rates in some rural areas and average urban rates, as the Court directed.

A. THE FCC SHOULD NOT USE RATE DATA TO MEASURE REASONABLE COMPARABILITY

Local service rates are affected by many local variables unrelated to universal service and therefore are inherently unsuited to measuring comparability. Even if it were possible to measure rates reliably (and we do not believe it is), the task would be extraordinarily difficult, time consuming, and expensive to adequately control for local variables and produce a measure for reliable comparability or a fair, predictable, and sufficient support mechanism.

At the present time, the FCC's Industry Analysis Division collects and reports local rates. However, methodological problems limit the acceptable uses of the resulting data to "broad brush" national surveys. For the reasons explained below, this data cannot be used to evaluate whether the FCC has achieved the comparability standards or to directly calculate support.

These same local variables also have a second undesirable effect. They reduce apparent rates in some low-rate areas, which needlessly increases the size of the national Fund needed to attain reasonable comparability.

1. Message Service and Measured Service Rates Make Local Rates Difficult to Compare

Any rates-based standard must reliably measure rates, including rates in places that impose Message Service and Measured Service rate designs.[64] In the past, the FCC has relied

[64] "Message service denotes those plans which bill customers by the call, regardless of the length of the call, while measured service plans bill customers based upon the length of the call. Either plan may also base charges on the distance between the calling and called party. Under either message or measured service, some amount of calling may be included in the monthly basic charge and therefore be made without additional cost to the customer." Industry Analysis & Technology Division Wireline Competition Bureau, Federal Communications Commission, Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service, (2005) ("*Reference Book*"), at I-1.

primarily on flat-rate data. For example, in its annual *Reference Book,* the Commission reported on the residential rates of customers in 95 urban areas. Flat-rate plans were available in all 95 areas and were used in the report.[65] This method is not adequate for evaluating comparability in specific locations. In areas using Message Service or Measured Service plans, flat-rate service may be unavailable or unpopular and the flat-rate rate data therefore substantially underestimates the local exchange bill.[66] Even if it does use usage data, the *Reference Book* may underestimate local usage.[67]

2. Differing Business and Residential Rates Make Local Rates Difficult to Compare

Section 254 protects both business and residential customers from having rates that are outside the comparability range. This is understandable when one considers that high business

[65] The *Reference Book* also reports measured service rates for residential service. *See Reference Book* at T. 1.3. However, those data are neither used in analyzing historical trends, T. 1.4, nor in universal service calculations that utilize values for the national "representative monthly charge" and the "standard deviation" of those representative monthly charges. *See id.* at T. 1.13.

[66] Verizon-Vermont submitted billing data for August and September 2005 to the VtPSB. The Flat-Rate Dial Tone rate in Vermont is $13.145. For every dollar paid by Verizon-Vermont customers under that charge, they pay more than another 50 cents in the form of local usage charges. A substantial minority of Vermont customers pays a "capped" local exchange charge (including local usage, but excluding SLCs, surcharges, and taxes) of $39.40 per month.

[67] The FCC has made efforts to measure the effects of Measured Service rates, but it has not adequately updated its methodology. The *Reference Book* translates measured service rates into equivalent flat rates for comparison purposes. It assumes that residential customers make 500 minutes per month of outgoing calls at one measured rate. If flat-rate service is unavailable, the FCC uses the measured/message service rate, along with the charges associated with placing 100 five-minute, same-zone, business-day calls. *See Reference Book* at I-2, I-3; *see also id.* at T. 1.2, n.3. However, this assumption has not been verified as realistic under modern usage patterns.

rates can harm the prospects for rural areas already struggling to retain jobs.[68] Accordingly, the statute requires the Commission to maintain the comparability of rates for both residential and business customers.

In its sampling of urban rates, the Commission's *Reference Book* shows that business rates are, in general, substantially higher than residential rates.[69] However, the ratio of business-to-residential rates is not uniform. In Grand Island, Nebraska, the flat-rate business rate is 139% of the residential flat-rate. At the other extreme, the business flat-rate in Huntington, West Virginia is 280% of the residential flat-rate.[70] Therefore, it is not statistically valid to assume that the pattern of residential rates accurately represents the rates paid by all customers who purchase local service.

To comply with the statute, a single comparability standard that measures only residential rates cannot be adequate. Any such system would fail to perceive comparability violations for business customers in areas that have relatively higher business rates.

Accordingly, if the Commission wishes to use a comparability standard based upon actual rates, it must adopt two comparability standards, one for residential and a second for business customers. Alternatively, the Commission could find a way to blend business and

[68] In discussing telecommunications reform and universal service legislation, Congress repeatedly cited the importance of telecommunications for commerce, particularly for rural areas, noting that driving rates upward would "divert industries and job growth away from the rural areas that need it the most." Senate Debate on the Telecommunications Act of 1996, 144 Cong. Rec. S857 (1998); *see also* House Debate on the Telecommunications Competition and Deregulation Act of 1995, 141 Cong.Rec. H9954, H10001 (1995); Senate Statements on The Communications Act of 1994, 140 Cong. Rec. S771-72 (1994).

[69] Average residential rates were $24.31 in 2004. Average business rates were $46.21. *See Reference Book* at T. 1.2, 1.8.

[70] *See id.* at T. 1.3, 1.10.

residential rates into an overall "representative" rate for each location, and then apply a single, combined comparability standard. Either choice, however, would add significant complexity.

3. Customer Option Plans and Newer Carrier Packaging Plans Make Local Rates Difficult to Compare

Carriers in many states offer customers local option plans that include mixtures of fixed and variable charges.[71] Since not every customer pays the same charge, there may be no "typical" charge, and it becomes difficult to reliably measure and compare local rates. It is not enough to select a single "local" rate and assume that it is typical or average. Such a methodology can produce wildly inaccurate results.[72]

The arrival of bundled services further complicates this measurement problem.[73] Now, most carriers market service bundles that include unlimited local, regional toll, and long distance calling in one package.[74] The packaging strategy makes it difficult to measure comparability because these bundles include both services protected by universal service and services that are not.[75] No generally accepted method exists to identify the "local" rate portion of these packages.

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[71] Some also include "EAS" coverage that entitles the customer to a wider calling area.

[72] For example, the General Accounting Office ("GAO") produced a report in February 2002 that included a survey of local exchange rates. *See* General Accounting Office, FEDERAL AND STATE UNIVERSAL SERVICE PROGRAMS AND CHALLENGES TO FUNDING, Report GAO-02-187 (2002). In that report, the GAO reported residential rates in Ann Arbor, Michigan to be $43.95, which was nearly the highest rate reported anywhere in the United States. However, a footnote reported that most customers actually purchase a "message-rate" service that allows 400 calls per month for a price of $12.01, a price below the national average. Thus the GAO's methodology inaccurately reported that customers in Ann Arbor pay nearly the highest rates in the country when in fact most customers actually pay rates below the national average. Similarly, West Virginia has as many as four local rate plans, each with a different geographic scope for flat-rated local calling. The rates for these packages range from $6.00 to $29.00 per month. Thus, it is impossible to identify a single West Virginia local rate.

[73] *See NPRM* ¶ 21.

[74] *See id.* ¶¶ 21-22. .

[75] Moreover, the packages may be wholly unavailable to customers in rural areas. *See id.*

Nor is it possible to omit sampling the customers who subscribe to these bundles, because they are numerous and omitting them is likely to bias the sample of remaining customers.[76]

These customer option plans and bundles make it at best very difficult, and probably impossible, for the FCC to identify a true "local" rate and to make reasonable comparisons of rates from one area to another. Where customer option plans are offered, any comparability measurement would need to develop a weighted mean price for the most popular plans. Second, it would need to exclude toll usage from the stated price of all popular toll-local bundles. Each of these adjustments increases the complexity of the measurement task, however, and could substantially increase administrative overhead. Moreover, it is unlikely that a single routine procedure can be sufficiently sensitive, and yet predictable and specific, without being arbitrary.

4. Varying State Policies Make Local Rates Difficult to Compare

The measured level of basic exchange rates is greatly influenced by numerous local variables that can effectively lower or raise local rates. This makes it difficult or impossible to compare local rates across jurisdictions.[77] A state might have high residential local rates because it has chosen to:

- Increase the minimum size of local calling areas;
- Reduce intrastate toll and access rates;
- Reduce business rates and increase residential rates;
- Reduce urban rates and increase rural rates;

[76] Customers with the highest local rates or highest usage charges generally have the greatest incentive to subscribe to high fixed-charge options and bundled packages.

[77] As the *NPRM* noted, rates in several urban areas shown in the adjusted GAO data were so high that they approached or exceeded the level for receiving support under the FCC's prior mechanism. *See id.* ¶ 25.

- Require carriers to pay a high percentage of the costs of poles and conduits that are jointly used with other utilities;
- Require carriers to offer some "vertical" services[78] at a "rolled in" charge;
- Provide discounts to certain customer groups, such as deaf or hearing-impaired customers;
- Allow carriers to recover broadband investments in basic rates;
- Adopt an aggressive depreciation policy; or
- Deregulate local rates or authorize a high rate of return.

Because of these policy differences, two residential customers in different states may have the same nominal local rates, yet have quite different support needs. Conversely, areas with similar costs can have quite different measured rates.

Calling area size is a particularly significant variable. In some areas, local rates are high because subscribers purchase the benefits of large local calling areas. For example, Buffalo, New York appears in the *Reference Book* as the city with the highest residential rates.[79] Yet Buffalo is often understood to be an area with extraordinarily wide local calling areas. Large calling areas reduce toll charges for short-haul calls within the customer's community of interest. The total bill for a Buffalo customer, therefore, may actually be lower than a bill in an area with lower local rates because the Buffalo customer does not have to pay toll rates for calls within the larger community.

[78] Vertical services include call-waiting and caller identification functions.

[79] *See Reference Book* at T. 1.3

5. Adopting a Rates-Based Standard Will Needlessly Inflate the Fund

The *Qwest II* Court was troubled by the wide divergence in local rate data.[80] After reviewing the actual rate data in the record and comparing the FCC's comparability benchmark to the nationwide urban average, the Court "fail[ed] to see how they could be deemed reasonably comparable."[81] With apparent disapproval, Court particularly noted that "rural rates falling just below the comparability benchmark may exceed the lowest urban rates by over 100%."[82] In other words, the Court tested the FCC's support system, in part, by comparing the lowest reported urban rates against the support benchmark ("Low-Rate Comparability Test"). For this reason, any measurement error that has the effect of lowering the lowest reported urban rates will increase the likelihood that any given level of Federal support will fail to satisfy the Low-Rate Comparability Test.

We discussed above how several local variables, such as Message and Measured Service, local options and bundles, and state policies affect rates and make it more difficult to reliably compare them from one area to another. A related problem is that many of the same local variables increase the rate variation among urban areas. Regardless of the cause, anything that lowers rates in low-rate areas makes it more difficult to satisfy the Low-Rate Comparability Test. A rates-based comparability standard, therefore, would force the FCC to provide universal service funding to address rate differences that arise, not merely from cost differences, but also from state policy decisions. Moreover, because few of these policy differences implicate universal service principles, a portion of that rates-based support would exceed the amount required by Section 254.

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[80] *See Qwest II* at 1237.

[81] *Id.*

[82] *Id.*

B. TO MEASURE REASONABLE COMPARABILITY, THE FCC SHOULD USE "NET SUBSCRIBER COST" AS A PROXY FOR RATES

The FCC can avoid these problems by adopting a cost-based proxy for "rates." Initially, the FCC should explicitly interpret the statutory term "rates" to mean a carrier's "net subscriber cost." Second, it should define net subscriber cost as the residual price that a subscriber needs to pay for basic exchange telecommunications service, given the company's cost of service. In this way, the FCC will relate rates to cost, and will also measure and manage what Congress actually intended.

A program that manages net subscriber cost should be able to efficiently bring rural "rates" (net subscriber costs) to a level reasonably comparable to nationwide urban "rates" (net subscriber costs). Moreover, by explaining in detail why net subscriber cost is a rational proxy for rates, the Commission will be able to demonstrate far more easily that its support programs are sufficient to produce reasonably comparable rates.[83]

1. Net Subscriber Cost Should Reflect Other Revenue Sources

A simple formula defining a carrier's net subscriber cost can recognize that local exchange carriers are business enterprises that offer a variety of services and receive revenues from a variety of sources. These other sources of revenue include revenue from other carriers and customers and for services that are not supported by universal service.

Specifically, the Commission should first determine each carrier's per-line costs for serving local customers. It could define "costs" as accounting ("embedded"), forward-looking, or a combination of both. The FCC could choose to define these costs at the state, study area, or

[83] The *Qwest II* Court said: "[W]e did intimate in *Qwest I* that we would be inclined to affirm the FCC's cost-based funding mechanism if it indeed resulted in reasonably comparable rates. However, we expected the Commission to return to us with empirical findings supporting this conclusion." *Qwest II* at 1237.

wire center scale. Second, the Commission could deduct revenues from other sources, including intercarrier net revenue, special access revenue, private line retail revenue, and customer revenue from non-USF services. The two-part formula follows:

(1) Net Subscriber Cost = {Costs – Other Revenues} / Switched Lines

(2) Other Revenues = Net Intercarrier Revenue +

Special Access and Private Line Retail Revenue +

Customer Revenue for Non-USF Services

This formula measures and manages what Congress actually intended to manage, the local subscriber's actual cost of acquiring service. As such, it provides a better match between the Commission's actual (cost-based) support mechanisms[84] and the statutory (rate-based) principles.

This formula also will improve the reliability of the FCC's measurement of whether reasonable comparability has been achieved. By focusing on the net cost of serving the customer, it provides an objective and reliable basis for comparing differences in rural and urban areas and avoids the many difficulties described above that arise when comparability is based upon measured local rates.

2. The Net Subscriber Cost Standard Would Require a Smaller Fund Than a Rates-Based Standard

The net subscriber cost formula also gives the Commission opportunities to repair problems with its universal service programs without committing itself to large increases in the national Fund. By equating rates with net subscriber cost, the Commission would avoid the variance in measured local rates that is driven by extraneous local variables like local calling area size.

[84] These programs include high-cost loop, local switching, and model-based support.

C. THE FCC SHOULD ADOPT A FIXED NUMERICAL STANDARD FOR REASONABLE COMPARABILITY

The FCC should adopt a fixed numerical standard for reasonable comparability in order to demonstrate clearly the range it deems reasonably comparable.

The Court has repeatedly applied numerical tests to assess whether rates were reasonably comparable. In *Qwest I,* the Court expressed doubt that a discrepancy of 70-80% between some rural and urban rates would fall within a reasonably comparable range, but also criticized the FCC for failing to adopt a standard that illuminated whether this was permissible.[85] In *Qwest II,* the Court rejected the FCC's standard due to an error in the agency's statutory construction, but did not criticize the concept of picking a definite number as the standard.[86] Additionally, the *Qwest II* Court analyzed whether the FCC's permitted rate range was reasonably comparable based on its own practical interpretation of price differences. Judge Kelly asked, rhetorically, at oral argument, whether the prices for a suit would be reasonably comparable if the price at one store was $1x and $2x at another store. Clearly, the Court preferred applying an objective numerical measurement to determine whether the FCC's interpretation of reasonable comparability was consistent with the statute.

D. THE FCC SHOULD REJECT THE EXISTING STANDARD BASED ON STANDARD DEVIATIONS

The FCC should reject the existing comparability standard that uses standard deviations. The Court found that using a 2.0 standard deviation comparability benchmark was just as arbitrary as its prior 135% cost-support benchmark.[87] Defining the benchmark as a number of standard deviations rounded to the nearest unit is not an inherently superior or more scientific

[85] *See Qwest I* at 1201.

[86] *See Qwest II* at 1236-37.

[87] *Id.* at 1237.

way to determine whether the rates in the data set itself are "reasonably comparable" than was the Commission's former method, using a percentage of the average rounded to the nearest five percent.

Moreover, the standard deviation benchmark is inferior in important ways. It has a record of instability and is "self-forgiving" in that it is likely to always give the same answer, even as facts change. A benchmark based on standard deviations will produce a nearly constant failure rate, *regardless of actual rate differences.* For example, the current 2.0 standard deviation benchmark automatically adjusts itself to changing facts so that approximately 4% of rates, and only 4%, remain above the two-standard deviation threshold.[88] Where rates (net subscriber costs) fall in a tight group, this benchmark demands close proximity. But when rates (net subscriber costs) are widely dispersed, the standard deviation benchmark forgives wide differences.[89] This self-forgiving standard tends to produce the same conclusions under almost any imaginable set of facts, and no matter how widely the actual rates are spread.

Self-forgiveness appears to be exactly how the benchmark is operating today. The 2.0 standard deviation benchmark has been stretching the comparability standard and tolerating more and more rate disparity over time. The most recent Joint Board Monitoring Report shows that over the years 2000 to 2004 the standard deviation in urban rates increased from $3.57 to $4.95, an increase of 39% in four years.[90] Two standard deviations, therefore, increased from $7.14 to $9.90, an increase of $2.76 over four years. As a result of this standard deviation increase, the

[88] When the FCC selected a threshold of two standard deviations from the average urban rate as the acceptable range for "reasonably comparable" rates, it conceded that approximately 96% of urban rates would fall within the acceptable range. *Remand Order* ¶ 81, n.312.

[89] The *Remand Order* explained that this is an inherent characteristic of rate distributions, which it explained follow a "log-logistic curve." *Id.* ¶ 81, n.312.

[90] *See* Monitoring Report at T. 7.10 (2004 data are subject to revision).

actual numerical benchmark rose during that period from 134% of the national average to 141% of the national average.[91] In other words, the standard deviation measurement has been tolerating larger and larger rate differences over time, primarily because there have been larger and larger rate differences over time.[92] It is not reasonable to believe that Congress intended the universal service system to forgive its own failures in this manner.

E. THE COMPARABILITY BENCHMARK SHOULD BE NO MORE THAN 125% OF NATIONWIDE URBAN RATES

The FCC must adopt a lower numerical standard for reasonable comparability than it used in the last two proceedings so that it can narrow existing rate differences[93] between rural and urban areas. Selecting a benchmark of no more than 125% of nationwide urban rates achieves this goal and is consistent with the Tenth Circuit Court's guidance in *Qwest II.*

In *Qwest I,* the Court expressed concern that a discrepancy of 70-80% between some rural and urban rates might impermissibly stretch the boundaries of rate comparability.[94] In *Qwest II* the Court rejected the FCC's prior comparability standard (equivalent to 135% - 138% of nationwide average rates) because it did not narrow existing rate differences.[95]

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[91] *See id.*

[92] The standard deviation yardstick has controlled support amounts since 2004, but is calculated and reported since 1993. *See id.*

[93] As explained above, we recommend defining "rates" as "net subscriber cost."

[94] *See Qwest II* at 1237 *citing Qwest I* at 1201.

[95] *See Qwest II* at 1236–1237. In the *9th Order,* the Commission adopted a reasonable comparability benchmark of 135% over nationwide urban rates. *See Ninth Report and Order and Eighteenth Order on Reconsideration, In the Matter of Federal-State Joint Board on Universal Service,* 14 FCC Rcd. 20,432 (1999) ¶ 10. Later, in the first *Remand Order,* the FCC adopted an equivalent benchmark, "two standard deviations over nationwide urban rates," that would largely replicate its prior support levels. *See Remand Order* ¶ 1. As the Court noted, the revised standard deviation-based benchmark equated to 138% of the nationwide average rate based on 2002 rate data. *See Qwest II* at 1236.

The FCC should now act consistently with its duty to advance universal service and adopt a far more aggressive reasonable comparability standard. The Court directed the FCC to use a lower measure that would "narrow the existing gap" between rural and urban rates and "abate[]" the significant variance between urban and rural rates.[96] *Narrowing* and *abating* the gap requires a much more aggressive standard.

Based on this evidence, the FCC should select a benchmark for reasonable comparability that is no higher than 125% of nationwide urban net subscriber costs. For example, using a 125% comparability benchmark, if the nationwide urban rate (net subscriber cost) is $20.00, then no rural customer would have a rate (net subscriber cost) after Federal support greater than $25.00.

115% of nationwide average cost has historically been used as the threshold for support for the loop costs of rural carriers. We recommend a benchmark of 125% (of nationwide urban net subscriber cost). Both 115% and 125% would produce rates (net subscriber costs) that are *reasonably* comparable, in a practical sense, while not exactly comparable. By setting the benchmark at no higher than 125% (of nationwide urban net subscriber cost), the FCC will narrow and abate existing gaps in rural and urban rates (net subscriber costs).

IV. THE FCC SHOULD CONTINUE TO USE A COST-BASED USF MECHANISM, BUT TIE THAT MECHANISM TO RATES AND SET A BENCHMARK THAT ENSURES SUFFICIENT SUPPORT

In the *NPRM*'s third section, the FCC seeks comment on how it should craft a support mechanism to fulfill Congress's intent and the FCC's statutory obligation to preserve and advance universal service.[97] As the Tenth Circuit found, the FCC's prior cost mechanism did not address the Section 254(b) principles correctly because, among other things, it was designed only

[96] *Id.* at 1236.

[97] *See NPRM* ¶ 23.

to preserve, and not advance, Congress's universal service principles and did not provide sufficient support to narrow the overly wide rural/urban rate gap.[98] To address these concerns, the FCC asks whether a rate-based, cost-based, or other type of support mechanism would best achieve the Act's rate-related principles.[99]

The Commission should affirm that costs are the most reliable basis for determining universal service support. Some changes are needed to the support mechanism, however. The FCC should redefine what "costs" are supported by the mechanism, and should link the cost mechanism with the rate-related comparability standard. It should establish a lower benchmark for support and make empirical findings, based on rural and urban cost data, that its mechanism achieves Congress's rate-related principles.

A. COST IS THE MORE RELIABLE BASIS FOR A SUPPORT MECHANISM

The Commission should affirm its prior findings, made consistently in multiple orders, that costs are a more reliable basis than rates for determining universal service support. As stated earlier, rates-based support also creates many perverse incentives and could increase Fund size.

1. Rates-Based Mechanisms Cannot Provide Sufficient Support

For the reasons stated in the preceding sections, there is no reasonable way to design a rates-based mechanism that would allow the FCC to make fair and representative rate comparisons between jurisdictions and service areas. As described in detail above, local rates reflect so many extrinsic local variables that reliable comparisons are, at best, extremely difficult. Those same factors complicate the task of using rates as the basis to calculate sufficient and predictable support, as anticipated by Section 254.

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[98] *See Qwest II* at 1235-1237.

[99] *See NPRM* ¶¶ 23-29.

A rates-based distribution mechanism greatly raises the stakes for rate measurements. Currently, rate data are merely used to suggest broad trends in society at large. Under a rates-based support mechanism, however, rate data would directly control the level of support for specific geographic areas. Methodological problems that today may be tolerable for "broad brush" national surveys quickly become unacceptable and arbitrary when used for such higher stakes purposes.

2. A Rates-Based Mechanism Could Create Perverse Incentives and Increase Fund Size

A rates-based support mechanism would introduce many new incentives in the process of setting intrastate rates.[100] For every state policy that can affect rates, a rates-based universal service mechanism would create a corresponding incentive to adopt the policy that maximizes support.

The FCC might view some of the resulting incentives as desirable, such as expanded broadband construction or lowered intrastate access rates. Other incentives would be clearly contrary to the principles of Section 254(b), such as to raise rates in rural areas in order to generate increased support.

The broadest issue, however, is not whether the incentives are good or bad, but whether they should exist. Any rates-based support system would create many incentives for states to revise their local exchange rate designs to maximize Federal support. This would be an unnecessary and harmful entanglement of Federal policy into the state's reserved jurisdiction over intrastate services. The FCC should proceed cautiously before it adopts such a system that entangles Federal universal service policy with intrastate rate design.

[100] *See id.* ¶ 26.

In addition, many states have now passed laws deregulating local rates in varying degrees.[101] In these states, carriers themselves could (and would have an incentive to) manipulate their local rate designs to maximize support without any oversight of the reasonableness of rate practices or benefit for consumers.

Whether the incentives fall on states or carriers, national effects would be likely. Universal service support payments would have a tendency to increase over time as rate design and other policies were adapted to the new incentives. This could significantly increase Fund size, and would not necessarily advance the principles of Section 254.[102]

3. Cost-Based Mechanisms are Superior

In developing USF mechanisms in the past, the FCC held that the only way to account for rate differences meaningfully among states is to adopt cost as a proxy for rates under Section 254. The FCC explained:

> [W]e must consider cost differences in determining which states need federal support to achieve rural rates that are comparable to urban rates…[T]he Joint Board and the Commission always have looked at cost differences, not rate differences, in determining high-cost support. Because the underlying purpose of rates is to recover the cost of providing service, *comparing costs provides a more accurate and consistent measure of what rate differences would be in any given state, given identical state rate policies*.[103]

Additionally, because states retain jurisdiction over local rates, the FCC cannot control development of rates, or rate design policy, so as to ensure meaningful rate comparisons.

Neither *Qwest I* nor *Qwest II* suggests abandonment of cost-based support. In *Qwest I*, the Court did not reject the high-cost mechanism because it was based on cost.[104] To the

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[101] *Id*.

[102] *Id.*

[103] *Remand Order* ¶ 23 (emphasis added).

[104] *See Qwest I* at 1202.

contrary, the Court determined that the Commission *could* adopt a cost-based USF mechanism as long as it tied the mechanism to the rate-related statutory standard and made empirical findings based on rural and urban cost data in the record to demonstrate that the mechanism actually fulfilled Congress's objectives.[105] In fact, if the FCC's cost-based support system actually produced reasonably comparable urban and rural rates, the Court would likely have upheld the mechanism.[106] Therefore, the Commission *may* use the current cost-based mechanism to achieve the Act's principles as long as it modifies the mechanism, as the Court directed, and shows that the program is likely to meet the statutory goals.[107]

B. THE FCC SHOULD MODIFY THE NON-RURAL COST-BASED SUPPORT MECHANISM

To continue using a cost mechanism, however, the Commission must make certain key changes to ensure that it carries out Congress's intent and the Court's instructions. The Commission should link the statutory term "rates" to a net subscriber cost methodology, lower the support benchmark to no more than 125% of nationwide urban net subscriber cost, and make several modifications to its cost model. Finally, the Commission should consider actions that would more closely tie the uses of support to the statutory principles.

1. The Net Subscriber Cost Methodology Can Link the Cost-Based Support Mechanism More Closely with Rates

As a first step, the FCC should link "costs" in its mechanism more closely with rates to tie the mechanism to the Section 254(b) principles. The net subscriber cost formula, explained above, achieves this purpose. It can successfully relate the statutory term "rates" with both the

[105] *See Qwest II* at 1237.

[106] *See Qwest I* at 1202.

[107] *See id.* at 1202-03.

cost mechanism that is used to distribute support and the statutory rates-related comparability standard.

The net subscriber cost formula accounts for other carrier revenue sources. This creates an opportunity to eliminate any wasteful universal service support that may exist in existing programs. Recognizing that other revenue sources exist could eliminate or greatly reduce the tendency of universal service mechanisms to fund double-recovery of some carrier costs.

2. The FCC Should Lower its Benchmark and Apply it to Net Subscriber Cost

The FCC should lower its benchmark for support to provide sufficient funds to achieve Congress's principles. A benchmark that is not more than 125% of the nationwide urban net subscriber cost will satisfy the statutory requirement that rates be reasonably comparable and tie to the reasonable comparability standard. This 125% benchmark is lower than the current benchmark, which is 131%,[108] but not fundamentally different from that level.

The 125% benchmark should be applied, however, not to raw nationwide average cost, but to nationwide urban net subscriber cost. This changes the status quo in two ways. First, comparison data should be drawn only from urban areas, rather than all urban and rural areas nationwide. In this calculation, the Commission should use model results from a sample of urban exchanges[109] and typical per-line revenue amounts for urban jurisdictions.[110]

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[108] The current national average cost is $21.43, and the current benchmark is $28.13. *See* USAC Summary of High Cost Model Support Projected by State for the Second Quarter of 2006 (file HC 16), available at http://www.universalservice.org/about/governance/fcc-filings/2006/quarter2/default.aspx (2005).

[109] GIS technology is capable of determining which wire centers are within urban areas, as defined by the U.S. Census. *See* Comments on Joint Board Recommended Decision by Montana Public Service Commission, Montana Consumer Counsel, Vermont Public Service Board, and Vermont Department of Public Service, *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45 (Dec. 20, 2002) at 40.

When adopted together, these changes will plausibly respond to the Court's directive that the FCC should advance universal service and will be financially achievable. Lowering the benchmark and using urban costs as a base will tend to increase Fund size. However, using the net subscriber cost formula should lower the Fund size because the universal service mechanism will, for the first time, recognize that a significant portion of incumbent local exchange carrier costs are recovered through intercarrier payments, special access charges, and sale of regulated non-basic services.

3. The FCC Should Modify Its Cost Model

If the FCC decides to retain use of its forward-looking cost model for non-rural companies, it should make several modifications. Since the FCC adopted its "synthesis model" in 1999, it has not made any substantive modifications, while the science of modeling telephone costs has advanced significantly. Before extending the life of the current cost model, the FCC should address several significant problems by using:

- Newer methods and better data for locating customer locations. Some of the customer location data inputs are ten years old. Moreover, the existing calculation routines are needlessly complex and do not reflect best current methods. Finally, the use of old customer location data is producing spurious allocations of new special access lines to rural wire centers where such lines do not actually exist. This inaccurately reduces the estimated cost differences between urban and rural areas.

[110] The revenues to be excluded are intercarrier revenues and revenues for services not supported by universal service. National average revenue figures may be safely used for the latter, absent evidence that urban areas are atypical in this regard. Intercarrier revenues in urban areas may be inferred from ARMIS data.

- Newer calculation methods to locate feeder and distribution plant. Newer methods follow roadways and rights-of-way and avoid barriers that block plant construction, such as highways, railroads, and bodies of water.
- More modern assumptions about investment costs, particularly for switching equipment. These costs have declined significantly since the FCC last collected switching cost data, making loop costs a higher proportion of total investment.
- More accurate and area-specific assumptions about carrier expenses. Current methods use some ARMIS ratios for some expense calculations and nationwide assumptions for others.
- More sensitive assumptions about the effects of geography on costs. The existing model attempts to adjust for some construction cost factors, such as soils and bedrock, but it does not adequately address other climatic,[111] topographic, or geographic[112] factors.

These changes would improve the accuracy of the model. Some of the changes could also reduce the Fund size by eliminating errors that presently tend to increase costs in certain areas that receive significant support. Because the issues here require more study, the *Second Remand Order* should include a Notice of Inquiry on modeling issues and an anticipated schedule for completing work on evaluating these changes to the model.

[111] Hurricane Katrina provided an obvious example of weather-induced costs. The effects of winter storms should also be evaluated.

[112] Forest cover greatly affects line maintenance costs for aerial plant, particularly in areas subject to tree icing.

4. The Commission Should Consider Actions that More Closely Tie Uses of Support to Statutory Principles

The FCC cannot show that its current cost-based mechanism always reduces local rates.[113] To remedy this, the FCC could require (not just permit, as it presently does) that Federal high-cost support funds be used to reduce rates. It could require carriers to provide explicit bill credits, similar to those now available under the Lifeline program. Then, Federal support would reimburse carriers for credits actually given to retail customers. Such credits would be "explicit"[114] in the sense that they would be visible to all customers, every month, and would demonstrably have the effect of lowering rates for local service.

C. THE FCC MUST FIND THAT SUPPORT IS SUFFICIENT TO ACHIEVE CONGRESS'S PRINCIPLES

The FCC should also make factual findings to verify that its mechanism produces sufficient support to advance Congress's universal service principles. In particular, the FCC should find, based on rural and urban cost data on the record, that it has provided sufficient support to achieve reasonably comparable rural and urban rates.

Even though the FCC should no longer use rates directly as the basis for meeting Section 254 principles, it should continue to collect actual rate data in urban areas and expand its data collection activity to include rural areas. Although there are many reasons why rate data cannot be relied upon directly for comparability or for support mechanism quantification purposes, these data can still serve a valuable early warning function when applied with expert judgment. Rate data can serve as a check on whether support is being sent to the right places and whether the FCC is actually meeting the comparability requirements of Section 254.

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[113] *See NPRM* ¶ 27. As noted above, support usually reduces rates because it is usually applied as an offset to revenue requirement. However, support can be used to fund capital improvements or for other purposes.

[114] *See* 47 U.S.C. § 254(e).

V. CONCLUSION

In these comments, Vermont and Maine describe a path that will solve problems with the FCC's current USF high-cost funding mechanism. None of these suggestions would require radical change. Several merely amount to providing a clearer explanation of what is being done and why. The two most significant changes Vermont and Maine urge are to equate the statutory term "rates" in Section 254 with a new concept, "net subscriber cost," and to lower the (comparability and mechanism) benchmark. The first of these changes would reduce the size of the national Fund by eliminating double recovery of some costs. The second change would increase the size of the Fund. The net result could conceivably be a net reduction in Fund size, although that is not certain.

Following is a summary of primary recommendations presented by Vermont and Maine in these comments:

Sufficiency:

- The FCC must provide sufficient support to advance all Section 254(b) principles, and it may consider all its universal service programs in meeting these goals;
- Based on the Tenth Circuit Court's decision, though, its primary task should be to advance reasonably comparable rural and urban rates and services;
- The FCC's Lifeline/Link-Up programs, not its rural high-cost mechanism, are the most effective means to ensure affordable rates;
- If the FCC determines it has not met the affordability goal, it can take specific steps targeted to reducing rates for low-income consumers, but it cannot provide less than sufficient support to achieve the reasonable comparability goal; and

- The FCC should ensure support is sufficient for carriers to build out networks in rural areas to provide access to advanced services and information services under Section 254(b)(2)-(3).

Comparability:

- The Tenth Circuit Court's direction to "narrow the existing gap" and "abate" significant rate variances demands a more aggressive reasonable comparability standard;
- The FCC should adopt a rural comparability standard of not more than 125% of nationwide urban net subscriber cost;
- The FCC should use nationwide urban net subscriber cost as a proxy for rates because rates are based on too many differing factors, making comparisons arbitrary; and
- The FCC should recognize that net subscriber cost equates to a carrier's cost of service per access line, excluding revenues the carrier receives from other sources.

Funding Mechanism:

- The FCC should continue to use a cost-based mechanism to determine high-cost support, although it should also make certain modifications to its existing mechanism consistent with the Court's directions;
- The FCC should use net subscriber cost to measure a carrier's need for support;
- It should provide support if a carrier's net subscriber cost exceeds 125% of nationwide urban net subscriber cost;
- If the FCC uses a net subscriber cost formula, for the first time, it will recognize that local companies recover significant cost through other revenues, and
- The net subscriber cost formula makes using a lower benchmark financially achievable without creating an excessive Fund.

It has been more than ten years since the Telecommunications Act of 1996 became law. During those years, Vermont and others have twice convinced a Federal Circuit Curt of Appeals that the Commission has not done right by the rural customers of so-called "non-rural" telephone companies. Many of these customers live in areas that are more rural, and impose higher costs per-line, than the typical customer of smaller companies. After much litigation and many years, the Commission's *Second Remand Order* should ensure that these customers are finally and demonstrably given fair treatment.

Respectfully submitted this 27th day of March, 2006.

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